

Amendments To the Claims:

Please amend the claims as shown. Applicants reserve the right to pursue any cancelled claims at a later date.

1.-26. (cancelled)

27. (new) A method for transmitting information via a packet-oriented communication network, comprising:

inserting the information that is to be transmitted as payload into a payload-field of a data packet of the packet-oriented communication network;

inserting target information into the data packet;

assigning routing information to the information which is to be transmitted prior to the insertion into the payload-field of the data packet for an onward transmission

transmitting the data packet, the information inserted into the data packet, and the assigned routing information to a target represented by the target information of the data packet in the packet-oriented communication network; and

forwarding the information transmitted to the target in accordance with the assigned routing information.

28. (new) The method according to Claim 27, wherein the information inserted into the payload-field of the data packet is assigned to at least one virtual connection made at least partially via the packet-oriented communication network.

29. (new) The method according to Claim 27, wherein the information transmitted to the target in the packet-oriented communication network is replicated according to the routing information and the replicated information is then forwarded.

30. (new) The method according to Claim 27, wherein

the information to be transmitted is a component of at least one data cell of a cell-oriented communication network, wherein

prior to the insertion into the payload-field of the at least one data packet a further information field where the routing information can be inserted is added to the at least one data cell, wherein

the at least one data cell transmitted to the at least one target in the packet-oriented communication network is forwarded to/via the cell-oriented communication network according to the assigned routing information.

31. (new) The method according to Claim 30, wherein before the at least one data cell is forwarded to/via the cell-oriented communication network the further information field is removed.

32. (new) The method according to Claim 30, wherein an item of information representing the number of data cells inserted into the payload-field of the data packet is inserted into the data packet.

33. (new) The method according to Claim 30, wherein the cell-oriented communication network is designed according to the asynchronous transfer mode.

34. (new) The method according to Claim 27, wherein the packet-oriented communication network is designed according to the standard IEEE 802.3.

35. (new) The method according to Claim 33, wherein the routing information includes further information for identifying an ATM service class.

36. (new) A communication system for transmitting information at least partially via a packet-oriented communication network, wherein the packet-oriented communication network comprises mechanisms for inserting the information as payload into a payload-field of at least one data packet of the packet-oriented communication network, and for inserting target information into the at least one data packet, the communication system comprising:

a mechanism assigned to the insertion mechanisms for assigning additional routing information to the information that is to be inserted into the payload-field of the at least one data packet, wherein

the packet-oriented communication network is designed in such a way that the at least one data packet and the information inserted into it together with the routing information assigned in each case are transmitted to at least one target represented by the target information of the data packet in the packet-oriented communication network, and wherein

at each such target switching mechanisms are provided, by which the information transmitted to the target is forwarded in accordance with the routing information assigned in each case.

37. (new) The communication system according to Claim 36, wherein

the information to be transmitted is a component of at least one data cell of a cell-oriented communication network, wherein

the mechanisms for inserting and the mechanisms for assigning are designed in such a way that prior to the insertion into the payload-field of the data packet an additional information field where the routing information can be inserted is added to the at least one data cell, wherein

the switching mechanisms are designed in such a way that the at least one data cell transmitted to the target in the packet-oriented communication network is forwarded to/via the cell-oriented communication network according to the routing information assigned in each case.

38. (new) The communication system according to Claim 37, wherein before the at least one data cell is forwarded to/via the cell-oriented communication network the additional information field is removed.

39. (new) The communication system according to Claim 37, wherein the switching mechanisms are designed in such a way that an item of information representing the number of data cells inserted into the payload-field of the at least one data packet is inserted into the data packet.

40. (new) The communication system according to one of the Claim 37, wherein the cell-oriented communication network is designed according to the asynchronous transfer mode.

41. (new) The communication system according to Claim 36, wherein the packet-oriented communication network is designed according to the standard IEEE 802.3.

42. (new) A communication device for transmitting information via a packet-oriented communication network located in the communication device, the communication device having insertion mechanisms for inserting the information that is to be transmitted as payload into a payload-field of at least one data packet of the packet-oriented communication network, and for inserting target information into the at least one data packet, wherein

assignment mechanisms which are assigned to the insertion mechanisms are provided for the purpose of assigning in each case additional routing information to the information that is to be inserted into the payload-field of the at least one data packet, wherein

the communication network is designed in such a way that

the at least one data packet and the information inserted into it together with the routing information assigned in each case are transmitted within the communication device to at least one target represented by the target information of the at least one data packet, and that

in the communication device switching mechanisms assigned to each such target are provided, by which the information transmitted to the target is forwarded in accordance with the routing information assigned in each case.

43. (new) A communication device according to Claim 42, wherein

the information to be transmitted is a component of at least one data cell of a cell-oriented communication network, wherein

the insertion mechanisms and the assignment mechanisms are designed in such a way that prior to the insertion into the payload-field of the at least one data packet, an additional information field where the routing information can be inserted is added to the at least one data cell, wherein

the switching mechanisms are designed in such a way that the at least one data cell transmitted to the at least one target in the packet-oriented communication network is forwarded to/via the cell-oriented communication network according to the routing information assigned in each case.

44. (new) A communication device according to Claim 43, wherein the switching mechanisms are designed in such a way that before the at least one data cell is forwarded to/via the cell-oriented communication network the additional information field is removed in each case.

45. (new) A communication device according to Claim 42, wherein at least one connection unit or central unit located in the communication device and including the respective switching mechanisms is represented by the target information of the at least one data packet.

46. (new) A communication device according to Claim 42, wherein the additional routing information represents at least one subscriber connection line connected to the respective connection unit, or at least one connection port assigned to the respective connection unit.

47. (new) A communication device according to Claim 43, wherein the cell-oriented communication network is designed according to the asynchronous transfer mode.

48. (new) A communication device according to Claim 42, wherein the packet-oriented communication network is designed according to the standard IEEE 802.3.

49. (new) A communication device according to Claim 47, wherein the routing information includes information for identifying an ATM service class, wherein a corresponding queue located on the appropriate connection unit is assigned to each ATM service class concerned.

Claims

1.-26. (cancelled)

27. (new) A method for transmitting information via a packet-oriented communication network, comprising:

inserting the information that is to be transmitted as payload into a payload-field of a data packet of the packet-oriented communication network;

inserting target information into the data packet;

assigning routing information to the information which is to be transmitted prior to the insertion into the payload-field of the data packet for an onward transmission

transmitting the data packet, the information inserted into the data packet, and the assigned routing information to a target represented by the target information of the data packet in the packet-oriented communication network; and

forwarding the information transmitted to the target in accordance with the assigned routing information.

28. (new) The method according to Claim 27, wherein the information inserted into the payload-field of the data packet is assigned to at least one virtual connection made at least partially via the packet-oriented communication network.

29. (new) The method according to Claim 27, wherein the information transmitted to the target in the packet-oriented communication network is replicated according to the routing information and the replicated information is then forwarded.

30. (new) The method according to Claim 27, wherein

the information to be transmitted is a component of at least one data cell of a cell-oriented communication network, wherein

prior to the insertion into the payload-field of the at least one data packet a further information field where the routing

information can be inserted is added to the at least one data cell, wherein

the at least one data cell transmitted to the at least one target in the packet-oriented communication network is forwarded to/via the cell-oriented communication network according to the assigned routing information.

31. (new) The method according to Claim 30, wherein before the at least one data cell is forwarded to/via the cell-oriented communication network the further information field is removed.

32. (new) The method according to Claim 30, wherein an item of information representing the number of data cells inserted into the payload-field of the data packet is inserted into the data packet.

33. (new) The method according to Claim 30, wherein the cell-oriented communication network is designed according to the asynchronous transfer mode.

34. (new) The method according to Claim 27, wherein the packet-oriented communication network is designed according to the standard IEEE 802.3.

35. (new) The method according to Claim 33, wherein the routing information includes further information for identifying an ATM service class.

36. (new) A communication system for transmitting information at least partially via a packet-oriented communication network, wherein the packet-oriented communication network comprises mechanisms for inserting the information as payload into a payload-field of at least one data packet of the packet-oriented communication network, and for inserting target information into the at least one data packet, the communication system comprising:

a mechanism assigned to the insertion mechanisms for assigning additional routing information to the information that is to be

inserted into the payload-field of the at least one data packet, wherein

the packet-oriented communication network is designed in such a way that the at least one data packet and the information inserted into it together with the routing information assigned in each case are transmitted to at least one target represented by the target information of the data packet in the packet-oriented communication network, and wherein

at each such target switching mechanisms are provided, by which the information transmitted to the target is forwarded in accordance with the routing information assigned in each case.

37. (new) The communication system according to Claim 36, wherein the information to be transmitted is a component of at least one data cell of a cell-oriented communication network, wherein

the mechanisms for inserting and the mechanisms for assigning are designed in such a way that prior to the insertion into the payload-field of the data packet an additional information field where the routing information can be inserted is added to the at least one data cell, wherein

the switching mechanisms are designed in such a way that the at least one data cell transmitted to the target in the packet-oriented communication network is forwarded to/via the cell-oriented communication network according to the routing information assigned in each case.

38. (new) The communication system according to Claim 37, wherein before the at least one data cell is forwarded to/via the cell-oriented communication network the additional information field is removed.

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42. (new) A communication device for transmitting information via a packet-oriented communication network located in the communication device, the communication device having insertion mechanisms for inserting the information that is to be transmitted as payload into a payload-field of at least one data packet of the packet-oriented communication network, and for inserting target information into the at least one data packet, wherein

assignment mechanisms which are assigned to the insertion mechanisms are provided for the purpose of assigning in each case additional routing information to the information that is to be inserted into the payload-field of the at least one data packet, wherein

the communication network is designed in such a way that

the at least one data packet and the information inserted into it together with the routing information assigned in each case are transmitted within the communication device to at least one target represented by the target information of the at least one data packet, and that

in the communication device switching mechanisms assigned to each such target are provided, by which the information transmitted to the target is forwarded in accordance with the routing information assigned in each case.

43. (new) A communication device according to Claim 42, wherein the information to be transmitted is a component of at least one data cell of a cell-oriented communication network, wherein

the insertion mechanisms and the assignment mechanisms are designed in such a way that prior to the insertion into the payload-field of the at least one data packet, an additional information field where the routing information can be inserted is added to the at least one data cell , wherein

the switching mechanisms are designed in such a way that the at least one data cell transmitted to the at least one target in the packet-oriented communication network is forwarded to/via the cell-oriented communication network according to the routing information assigned in each case.

44. (new) A communication device according to Claim 43, wherein the switching mechanisms are designed in such a way that before the at least one data cell is forwarded to/via the cell-oriented communication network the additional information field is removed in each case.

45. (new) A communication device according to Claim 42, wherein at least one connection unit or central unit located in the communication device and including the respective switching mechanisms is represented by the target information of the at least one data packet.

46. (new) A communication device according to Claim 42, wherein the additional routing information represents at least one subscriber connection line connected to the respective connection unit, or at least one connection port assigned to the respective connection unit.

47. (new) A communication device according to Claim 43, wherein the cell-oriented communication network is designed according to the asynchronous transfer mode.

48. (new) A communication device according to Claim 42, wherein the packet-oriented communication network is designed according to the standard IEEE 802.3.

49. (new) A communication device according to Claim 47, wherein the routing information includes information for identifying an ATM service class, wherein a corresponding queue located on the appropriate connection unit is assigned to each ATM service class concerned.